

You are **strongly** encouraged to work in groups, following the procedure as in homework [MS09](#).

**Metric Space Exercise 14.** Variant of 2.4.33.1 (p. 149).

Let  $A$  be a connected subset of a metric space and  $A \subset B \subset \bar{A}$ . Prove that  $B$  is connected.

Remark. Said differently, (since  $\bar{A} = A \cup A'$ ), if  $B$  is formed by adjoining to a connected set  $A$  some (or all) of the limit points of  $A$ , then  $B$  is connected.